

of producing a polyester support that is given a "reverse curl" sufficient for striking off a curl in the film's width direction. Ikuhara at col. 2, lines 14-17.

In describing its film, Ikuhara states that a preferable thickness of each layer is within the range of 10 to 90  $\mu\text{m}$ , more preferably 20 to 80  $\mu\text{m}$ , and further preferably 30 to 70  $\mu\text{m}$ . Ikuhara at col. 4, lines 62-64. That disclosure does not teach or suggest an outer layer having a thickness of from 0.2 to 6  $\mu\text{m}$  as is presently claimed. The Examples of Ikuhara likewise do not suggest the claimed outer layer thickness, and instead disclose more than 80 samples having layers of thicknesses from 15 to 82  $\mu\text{m}$ . Importantly, and with particular emphasis on the lower end of the thickness range, Ikuhara states that "a sufficient reverse curl cannot be attained by layers thinner than the above described ranges," after disclosing the general ranges in col. 4, lines 62-65. In light of the objects of the Ikuhara invention, and the teaching that layer thicknesses below 10  $\mu\text{m}$  cannot obtain the desired "reverse curl" touted as an objective of the invention, one skilled in the art would not have been motivated to make the claimed films having an outer layer of a thickness of 0.2 to 6  $\mu\text{m}$ .

The Examiner relied on Kimura only for a teaching of treating films to achieve certain surface tensions prior to application of a functional coating. The teachings relating to surface tension and functional coatings, however, do not address the issues discussed above. Furthermore, there was no suggestion in the art to select smaller film layer thicknesses from Kimura and instead use those thicknesses in Ikuhara. As note above, Ikuhara counsels against such a modification. In responding to this rejection, applicants do not agree that one skilled in the art would have been motivated to combine Kimura's teachings relating to surface tension and functional coatings with the disclosure of Ikuhara. That issue is simply moot in light of the other reasons for traversal of the rejection set forth above.

In light of the above, applicants respectfully request that the Examiner withdraw this rejection.

### **III. Double patenting rejection over Peiffer**

The Examiner rejected all claims under the judicially created doctrine of obviousness-type double patenting over claims 1-17 of U.S. Patent No. 6,054,212 to Peiffer et al. ("Peiffer") in view of Kimura. In support of the rejection, the Examiner stated that Peiffer claims teach films similar to those claimed in the present

application, but lacks a teaching of films having a functional coating. The Examiner concluded, however, that it would have been obvious to apply a functional coating as disclosed in Kimura to the films claimed in Peiffer. Applicants respectfully traverse the rejection.

The Examiner has not provided sufficient evidence to select Kimura's disclosure of the use of coatings for its disclosed films, and to apply that teaching to use the coatings instead on the Peiffer films. First of all, no *per se* rule exists that the addition of a functional coating to any and all films is obvious. Instead, and as required by the patent statute, there must be sufficient motivation in the art to make any particular combination of a film with a separate teaching of a coating. In this regard, the Examiner has not established why one skilled in the art would have selected the films of Peiffer, in particular and apart from other films, as a candidate for modification with the coatings taught in Kimura.

Aside from the Examiner's burden of proof discussed above, those skilled in the art would have regarded the Peiffer films as serving as very good oxygen barriers, as evidenced by the oxygen permeability value recited in claim 2 of Peiffer. For many applications of the films in practice, that oxygen barrier property of the film alone is quite sufficient. Thus, there was not necessarily an immediate need, or even a sufficient motivation, to apply a functional coating to the film to boost the gas barrier properties of the Peiffer film.

Lastly, even if one skilled in the art would have been motivated to apply the coating of Kimura to the Peiffer films, that combination still fails to suggest the claim limitations reciting a functional coating having a thickness of from 5 to 100 nm. As noted in section 2142 of the MPEP, a combination of references does not establish a *prima facie* case of obviousness unless, among other things, the combination teaches each and every claim limitation. In the discussion of coatings in Kimura cited by the Examiner at col. 6, lines 31-53, Kimura lacks any teaching of the thickness of those coatings. Moreover, in Example 4, the thickness of the aluminum coating in that exemplified film is 150 nm, which is not in the range of from 5 to 100 nm. For this additional reason, the Examiner has not established a *prima facie* case of obviousness over the Peiffer claims and Kimura, and the rejection should be withdrawn.

In light of the above, the pending claims should be in condition for allowance.  
If there is any fee due in connection with the filing of this Amendment, please charge  
the fee to our Deposit Account No. 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,  
GARRETT & DUNNER, L.L.P.

By: 

Steven J. Scott  
Reg. No. 43,911

Date: December 1, 2001



**Appendix Indicating Changes to Claims**

1. (Twice Amended) A transparent, biaxially oriented polyester film comprising:

(A) a base layer, at least 80% by weight of which is composed of a thermoplastic polyester; and

(B) at least one outer layer having a thickness of from 0.2 to 6  $\mu\text{m}$ , wherein the outer layer is composed of a polymer, or of a mixture of polymers comprising: at least 40% by weight of ethylene 2,6-naphthalate units; ethylene terephthalate units, wherein the ethylene terephthalate units are present in an amount up to 40% by weight; and optionally up to 60% by weight of units from aliphatic diols, cycloaliphatic diols, aromatic diols, aliphatic dicarboxylic acids, cycloaliphatic dicarboxylic acids, aromatic dicarboxylic acids, or a combination thereof,

wherein the glass transition temperature ( $T_g$ 2 value) of the polyester film is above the  $T_g$ 2 value of the base layer but below the  $T_g$ 2 value of the outer layer, and at least one film surface has a surface tension of from 35 to 65 mN/m or has been provided with a functional coating of thickness from 5 to 100 nm or both.

15. (Twice Amended) A transparent, biaxially oriented polyester film comprising:

(A) a base layer, at least 80% by weight of which is composed of a thermoplastic polyester; and

(B) at least one outer layer having a thickness of from 0.2 to 6  $\mu\text{m}$ , wherein the outer layer is composed of a polymer, or of a mixture of polymers comprising: 5 to 40% by weight of ethylene 2,6-naphthalate units; more than 40% by weight of ethylene terephthalate units, and 0 to < 55% by weight of units from aliphatic diols, cycloaliphatic diols, aromatic diols, aliphatic dicarboxylic acids, cycloaliphatic dicarboxylic acids, aromatic dicarboxylic acids, or a combination thereof,

wherein the glass transition temperature ( $T_g$ 2 value) of the polyester film is above the  $T_g$ 2 value of the base layer but below the  $T_g$ 2 value of the outer layer, and at least one film surface has a surface tension of from 35 to 65 mN/m or has been provided with a functional coating of thickness from 5 to 100 nm or both.

RECEIVED  
DEC 05 2001  
TC 1700



1773  
PATENT  
Customer Number 22,852  
Attorney Docket No. 07456.0009

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: )  
Herbert PEIFFER et al. ) Group Art Unit: 1773  
Serial No.: 09/274,781 ) Examiner: V. Chen  
Filed: March 24, 1999 )

For: TRANSPARENT POLYESTER FILM WITH HIGH OXYGEN BARRIER AND  
ADDITIONAL FUNCTIONALITY, ITS USE AS PROCESS FOR ITS  
PRODUCTION

TRANSMITTAL LETTER

Assistant Commissioner for Patents  
Washington, DC 20231

RECEIVED  
DEC 05 2001  
TC 1700

Sir:

Enclosed is a reply to the Office Action of August 9, 2001. The item(s) checked below are appropriate:

- ☒ Applicants hereby petition for a one month extension of time to respond to the above Office Action. The fee of \$110.00 for the Extension is enclosed.
- ☒ A check for \$110.00 to cover the above fee is enclosed.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Dated: December 1, 2001

By: Steven J. Scott  
Steven J. Scott  
Reg. No. 43,911